

REMARKS

In the non-final Office Action mailed on April 7, 2004 (paper no. 14), the Examiner indicated that claims 7-11 would be allowable if rewritten in independent form; rejected claims 19-35 under 35 U.S.C. § 103(a) over U.S. Patent No. 6,697,326 to Britton et al. ("Britton") in view of U.S. Patent No. 6,115,545 to Mellquist ("Mellquist"); and rejected claims 1-6 and 12-18 under 35 U.S.C. § 103(a) over Britton in view of Mellquist and U.S. Patent No. 6,345,294 to O'Toole et al. ("O'Toole"). In this response, Applicant amends claim 29 to more particularly point out and distinctly claim Applicant's invention. Support for the claim amendment is provided throughout the specification, particularly, page 4, lines 10-15. The claim amendment adds no new matter. Claims 1-35 are presently pending. Applicant respectfully traverses the Examiner's rejections. Further examination and review in view of the remarks below are respectfully requested.

Applicant is grateful to the Examiner indicating that claims 7-11 are allowable over the prior art.

Applicant's techniques are directed to an approach for establishing contact with an unconfigured node within a network from a node outside the network. In one approach, the node outside the network initiates contact with the unconfigured node by transmitting a message calling for a response, such as a datagram, to an unassigned network address within the unconfigured node's network. The unconfigured node sets itself to use the unassigned network address by sending a response message addressed to the node outside the network.

Claims 1-6 and 12-35 stand rejected over Britton, either in combination with Mellquist or Mellquist and O'Toole. Unlike Applicant's claims, Britton is directed to a process for solving the problem of providing backup adapters when two or more adapters of a host are on the same physical network. (col. 5, lines 62-64). When a first adapter (adapter A) on a host becomes active, the host transmits an ARP advertisement into the network over the first adapter. The ARP advertisement associates the MAC address (MAC-A) of the first adapter with a first IP address (IP-A) of the host. The transmitted ARP advertisement is received by all hosts in the same physical network, and the receiving hosts update their ARP cache table to map the

specified first IP address (IP-A) to the specified MAC address of the first adapter (MAC-A) accordingly. If the ARP advertisement is also received at a second adapter (adapter B) on the transmitting host, then the host knows that adapter B is on the same physical network as adapter A. The host designates adapter B as a backup adapter for adapter A. The host also designates adapter A as a backup adapter for adapter B. (col. 2, line 66-col. 3, line 17).

Subsequently, if adapter A fails or becomes inactive, the host transmits an ARP advertisement via adapter B associating the MAC address of adapter B (MAC-B) with the IP-A of the host. This causes each host in the network to update its ARP cache table to map IP-A to MAC-B. On the host, network connections to IP-A originally served via adapter A are served non-disruptively over adapter B. Whenever the host receives an ARP request for IP-A on adapter B, the host replies to the request to MAC-B. Whenever adapter A later becomes active, the host transmits a gratuitous ARP advertisement via adapter A that maps IP-A to MAC-A, which allows adapter A to re-assume responsibility for responding to ARP requests for IP-A. (col. 3, lines 18-33).

In view of the above, it can readily be seen that Britton is directed to transmission of a message over a single physical network in order to determine whether multiple adapters on a host are on the same network. In addition, the transmitted message indicates an association of a network address to a physical address of an adapter on the host and, therefore, the transmitted message has nothing to do with establishing contact with an unconfigured node outside the physical network, for example, in another network as in Applicant's invention.

All of the pending claims are directed to establishing contact with a node within a network from a node outside the network, and recite a message transmitted by the node outside the network to an address designated as being unused within the network, and a reply message addressed to the node outside the network indicating that the node within the network is receiving messages at the address, or similar language. Britton simply does not disclose or suggest (1) establishing contact with a node in one network from another node in another, different network, (2) sending or receiving a message to an address designated as being unused in the network, or (3) sending or receiving a

response message addressed to the node outside the network that the node inside the network is receiving messages at the address. As discussed above, Britton determines whether multiple adapters on a host are connected to the same physical network by use of an ARP message transmitted via an adapter on the host. Contrary to the position expressed by the Examiner, Britton does not disclose or suggest a novel use of the ARP in a system of interconnected IP networks.

The Examiner went on to indicate that Mellquist teaches IP configuration of a network device connected to a local network, and that "it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Mellquist's automatic IP address allocation and assignment into Britton's method and apparatus for generating replies to address resolution protocol (ARP) requests with the motivation being to provide a method and system for establishing contact with a computing device that is outside the distinguished computer network."

Applicant respectfully disagrees. Unlike Applicant's claims, Mellquist is directed to configuring a node connected to a network using a module operating within a console connected to the same network. Once activated, the module obtains an unused network address and waits for receipt of a request from the node. Upon receipt of the request, the console forwards to the node a response that includes the unused network address. (col. 3, lines 29-47). Mellquist simply does not disclose or suggest either (1) establishing contact with a node in one network from another node in another, different network, or (2) a message to an address designated as being unused in the network. To the contrary, the messages transmitted in Mellquist are addressed to specific nodes in the network, either the node connected to the network that is being configured or the console connected to the network that is used to configure the node. Thus, Mellquist discloses a process of configuring a node that is totally different than and unrelated to Applicant's process of establishing contact with a node within a network from a node outside the network by using a message addressed to an address designated as being unused within the network.

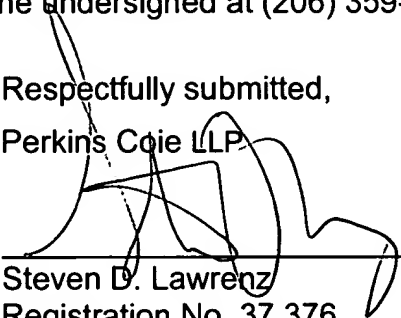
Further, as Britton is directed towards determining whether multiple adapters of a host are in the same physical network, while Mellquist is directed toward configuring a

node connected to a network from another node connected to the same network, there is no motivation or benefit to combine the two references. Even if one assumes that there is a suggestion or motivation to combine the Britton and Mellquist references, the combination of the references still would not disclose, suggest or teach Applicant's claimed feature of establishing contact with a node in a first network from another node in a second network by transmitting a message to an address designated as being unused in the first network.

Conclusion

In view of the foregoing, Applicant respectfully submits that claims 1-35 are allowable and ask that this application be passed to allowance. If the Examiner has any questions or believes a telephone conference would expedite examination of this application, the Examiner is encouraged to call the undersigned at (206) 359-8000.

Respectfully submitted,
Perkins Coie LLP


Steven D. Lawrenz
Registration No. 37,376

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Correspondence Address:

Customer No. 25096
Perkins Coie LLP
P.O. Box 1247
Seattle, Washington 98111-1247
(206) 359-8000